

# INTERNATIONAL SEARCH REPORT

International Application No  
**PCT/EP2004/003538**

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07K14/435 C12N15/12 C12N15/63 C12N15/74 C12N15/79  
A01K67/027 A61K38/17 A61K48/00 C12Q1/68 G01N33/53

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal, WPI Data, PAJ, BIOSIS, EMBL

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE EMBL 'Online! 4 September 2002 (2002-09-04), XP002256969 Database accession no. AF535142 cited in the application Homo sapiens enaptin mRNA, complete cds. Institute for Biochemistry I, Medical Faculty, University of Cologne. Germany. Unpublished. 99.9% identity in 10001 bp and 99.44% id. in 3048 aa overlap abstract</p> <p style="text-align: center;">----- -/-</p>	15

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

30 August 2004

Date of mailing of the international search report

07/09/2004

Name and mailing address of the ISA

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE EMBL 'Online!  29 October 2002 (2002-10-29),  XP002256970  Database accession no. AF495910  Homo sapiens nesprin-1 mRNA, complete cds.  99.9% id. in 9422 bp overlap and 99.21%  id. in 3055 aa overlap.  abstract  -&amp; ZHANG ET AL.,: "The nesprins are giant  actin-binding proteins, orthologous to  Drosophila melanogaster muscle protein  MSP-300." GENOMICS,  vol. 80, no. 5, 2002, pages 473-481,  XP002257483  cited in the application  abstract  page 475, left-hand column, paragraph 2 -  page 476, right-hand column, paragraph 2;  figures 1,2  page 479, left-hand column, paragraph 2  -&amp; ZHANG ET AL.,: "Nesprins a novel  family of spectrin-repeat-containing  proteins that localize to the nuclear  membrane in multiple tissues." JOURNAL OF  CELL SCIENCE,  vol. 114, no. 24, 2001, pages 4485-4498,  XP002257484  abstract  page 4486, left-hand column, paragraph 2  page 4487, right-hand column, paragraph 3  - page 4488, left-hand column, paragraph  3; figure 2</p>	15
X	<p>DATABASE EMBL 'Online!  7 February 2001 (2001-02-07),  XP002256971  Database accession no. AB051543  cited in the application  Homo sapiens mRNA for KIAA1756 protein,  partial cds  100% identity in 2985 bp overlap  abstract</p>	15
X	<p>DATABASE EMBL 'Online!  20 March 2002 (2002-03-20),  XP002256975  Database accession no. AL713682;  Homo sapiens mRNA; cDNA DKFZp547N107 (from  clone DKFZp547N107).  clone form S. Wiemann, Molecular Genome  Analysis, German Cancer Research Center  (DKFZ). 99.75% id. in 2891 bp overlap  abstract</p>	15

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE EMBL 'Online!  28 June 2002 (2002-06-28),  XP002256972  Database accession no. AX430417  abstract  &amp; WO 02/40715 A (INCYTE GENOMICS INC.)  23 May 2002 (2002-05-23)  cited in the application  SEQ.ID.N.199  100% identity in 1993 bp overlap</p>	15
X	<p>DATABASE EMBL 'Online!  28 June 2002 (2002-06-28),  XP002257485  Database accession no. AX430670  abstract  &amp; WO 02/40715 A (INCYTE GENOMICS INC.)  23 May 2002 (2002-05-23)  cited in the application  SEQ.ID.N.425  96.38% identity in 664 aa overlap</p>	15
X	<p>DATABASE EMBL 'Online!  26 July 2001 (2001-07-26),  XP002256976  Database accession no. AAI59698  abstract  &amp; WO 01/53312 A (HYSEQ INC.)  26 July 2001 (2001-07-26)  SEQ.ID.N. 3687  99.95% identity in 2098 bp overlap</p>	15
X	<p>DATABASE EMBL 'Online!  22 October 2001 (2001-10-22),  XP002257486  Database accession no. AAI57912  abstract  &amp; WO 01/53312 A (HYSEQ INC.)  26 July 2001 (2001-07-26)  SEQ.ID.N.115  99.95% identity in 2098 bp overlap</p>	15
X	<p>DATABASE EMBL 'Online!  22 October 2001 (2001-10-22),  XP002257487  Database accession no. AAM40542  abstract  &amp; WO 01/53312 A (HYSEQ INC.)  26 July 2001 (2001-07-26)  SEQ.ID.N. 5437  99.71% identity in 699 aa overlap</p>	15

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE EMBL 'Online!  22 October 2001 (2001-10-22),  XP002257488  Database accession no. AAM38756  abstract  &amp; WO 01/53312 A (HYSEQ INC.)  26 July 2001 (2001-07-26)  SEQ.ID.N. 1901  99.57% identity in 698 aa overlap</p>	15
X	<p>DATABASE EMBL 'Online!  13 February 2002 (2002-02-13),  XP002256977  Database accession no. AAS90431  abstract  &amp; WO 01/75067 A (HYSEQ. INC)  11 October 2001 (2001-10-11)  SEQ ID No 26235  99.66% identity in 2098 bp overlap</p>	15
X	<p>DATABASE EMBL 'Online!  13 February 2002 (2002-02-13),  XP002257489  Database accession no. AAS90799  abstract  &amp; WO 01/75067 A (HYSEQ INC)  11 October 2001 (2001-10-11)  SEQ.ID. N. 26603  94.08% identity in 4143 bp overlap</p>	15
X	<p>DATABASE EMBL 'Online!  18 February 2002 (2002-02-18),  XP002257490  Database accession no. ABG26244  abstract  &amp; WO 01/75067 A (HYSEQ INC.)  11 October 2001 (2001-10-11)  SEQ.ID.N.56603  99.14% identity in 699 aa</p>	15
X	<p>EP 1 293 569 A (RES ASS FOR BIOTECHNOLOGY  ;HELIX RES INST (JP))  19 March 2003 (2003-03-19)  SEQ.ID.N. 399 (99.9% identity in 1653 bp  overlap) and 2038 (98.87% identity in 534  aa overlap)  abstract</p>	15
T	<p>DATABASE EMBL 'Online!  14 July 2003 (2003-07-14),  XP002256974  Database accession no. AX780848  abstract</p> <p style="text-align: center;">-/--</p>	15

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
E	<p>&amp; WO 03/039443 A (DEUTSCHES KREBSFORSCHUNGSZENTRUM) 15 May 2003 (2003-05-15) SEQ.ID.N. 3003 99.36% identity in 2985 bp overlap</p>	15

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Information on patent family members

International Application No

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## Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
  - a. type of material
    - ☒ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material
    - ☒ in written format
    - ☒ in computer readable form
  - c. time of filing/furnishing
    - ☐ contained in the international application as filed
    - ☐ filed together with the international application in computer readable form
    - ☒ furnished subsequently to this Authority for the purpose of search
2. ☒ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments: